

## **Cue Lure: An Eco-friendly Tool to Control Fruit fly in Cucurbits**

**Dr.I.Gnanavel**

**Student of CFA program**

**Agriculture Officer**

**Perambalur District, Tamilnadu**

**Email: [ignanavel@gmail.com](mailto:ignanavel@gmail.com)**

**Mobile: 076394 11547**

A farmer, Mr. Padakathu, M, from Perambalur District of Tamilnadu cultivated cucurbit crops Ridge gourd, Snake gourd and Bitter gourd during October 2017- January 2018 and he found installation of Cue lure traps more successful for controlling fruit fly and getting highest crop yield in cucurbits.

Mr.Padakathu, cultivated cucurbits ridge gourd, snake gourd and bitter gourd with an area of 0.40 acre for each crop. He used Pandal system for cultivating the crops and adopted a planting spacing of 2.5 X 2.0m. He applied only blanket recommendation fertilizers without testing soil. He used a systematic insecticide for controlling sucking pests in the early stage of the crop. But, the infestation of fruit fly (*Bactrocera cucurbitae*) was severe in all the cucurbit crops. More than 40 per cent of ridge gourd and snake gourd were affected by fruit fly. Bitter gourd was also affected the same by 15 per cent. He applied only insecticide to control sucking pests but did not do anything to restrict fruit fly due to lack of knowledge.

During that period a student of Certified Farm Adviser Program of MANAGE, Hyderabad Dr.I.Gnanavel visited the cucurbits field (at flowering and fruiting stage) after getting trained on Vegetable Production at Indian Institute of Vegetables Reaesrch, ICAR, Varanasi, Uttar Pradesh. He observed the severe incidence of fruit fly damages and malformed fruits in cucurbits and discussed the pest incidence with the farmer . Till then, he had not applied any control methods for fruit flies.

The CFA student advised the farmer to adopt eco-friendly management practices

1. Summer ploughing to expose the pupae of the fruit fly and crop rotation with non-cucurbits crops
2. Collecting the damaged fruit and destroying it to practice clean cultivation
3. Installation of mineral water bottle trap or Mc Phail tarp with cuelure (as MAT) saturated with wood blocks (Ethonol: cuelure: Carbaryl in a ratio of 8:1:2 @ @25-30 traps per ha prior to flower initiation.
4. Growing maize as border crop and application of insecticides on maize
5. Neem oil @3% as foliar spray as need based
6. Keeping molasses+ insecticide (malathion)@10% to get attracted the insects
7. Growing Tulsi as a trap crop and application of Carborandum / Malathion/ Dichlorvos on tulsi) to control fruit fly incidences and asked him to install cue lure trap immediately.

Cue lure trap consists of used mineral water bottle trap, baited with cue lure saturated wood blocks (ethanol: cuelure: carbaryl in a ratio 8:1:2) @ 25 traps/ha and it should be installed prior to flower initiation. The farmer bought cue lure traps with a subsidized rate of Rs 50 /trap from a Private ICAR-KVK located at Perambalur District of T.N and installed the traps @ 10 No/acre. The farmer said “If I had already known about cue lure tool I would have installed the traps and could have saved my lost produce due to the pest incidence. Now I am satisfied with the result of cue lure tool and I could save my remaining 60 per cent of the produce from the incidence of fruit fly”. He added that ‘he would apply all the eco-friendly management practices to control fruit fly in the succeeding seasons.

Now the farmer has taken up the cucurbits cultivation again in this season from March 2018 after leaving a fallow period of three months. The crops ridge gourd, snake gourd and bitter gourd are at flowering stage. The farmer has been adopting all the eco-friendly management practices which were recommended by CFA student. The farmer Mr.Padakathu said “Now I have been adopting all the eco-friendly management practices including Cue lure for control of fruit fly in this season since the crops are sown and I hope I will get more yield without damage by fruit flies.

Hence, based on the experiences faced by the farmer Mr. Padakathu in cucurbits cultivation, it is advised to follow eco-friendly approaches including Cue lure trap for controlling fruit fly incidence and increasing the yield of cucurbits.



**Infestation of Fruit fly in Ridge Gourd, Snake Gourd and Bitter Gourd**



**Installed Cue lure in Cucurbits' farmer field**



**Field inspection made by CFA student**

**Name and Address of the farmer:**

**Mr. M.Padakathu, Perali (Village),**

**Veppur (Block), Perambalur (D.T),**

**Tamil Nadu, India**

